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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,100	12/31/2001	Gerald Grand	1875.0700005	5880

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EXAMINER
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WILSON, ROBERT W

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 12/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/032,100	<b>Applicant(s)</b> GRAND ET AL.	
	<b>Examiner</b> Robert W. Wilson	<b>Art Unit</b> 2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-10 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 6 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09/25/03</u> . | 6) <input type="checkbox"/> Other: _____  |

***Claim Objections***

1. Claims 6 & 11 are objected to because of the following informalities: The examiner believes that the specification teaches that the MPEG packet has already been mapped into the DOCSIS packet by the CMTS as a result the examiner believes that the claims 6 & 11 are the reverse what is actually being performed by the system. The examiner recommends that the applicant amend claims 6 & 11 to say the reverse of what they now say. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Hilla (U.S. Patent No.: 6,226,771)

Referring to claim 1, Hilla teaches: a method for creating an ethernet-formated packet as shown in Fig 1 and per col. 2 line 33-col. 3 line 49. The applicant broadly claims an “upstream packet”.

102 per Fig 2 is a packet which is received and which the examiner interprets as an upstream packet. Upon receiving the packet shown as 102 per Fig 1; the type of frame is determined which examiner interprets as receiving and determining the type of physical prepended data.

Based upon the determination of the type of frame a frame field which is 118 per Fig 1 is added to the packet in the upstream header. The examiner interprets the frame field as a packet tag.

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which the tag is added to the upstream packet header as well as to the payload of the upstream packet which is shown in Fig 1. Next a VLAN ID which is 124 per Fig 1 is added which is an encapsulation tag which is also appended to the payload of the upstream packet. 120 per Fig 1 or source address and 116 per Fig 1 or destination address are also added to the address header to the payload shown in Fig1.

In addition Hilla teaches:

Regarding claim 2, the DOCSIS packet is inherently an Ethernet packet which has been removed from the TDMA frame of the CMTS and CM system; therefore, since the packet is an Ethernet packet it would be a DOCSIS packet per col. 2 line 33-col. 3 line 49.

Regarding claim 3, Upon receiving the packet shown as 102 per Fig 1; the type of frame or physical characteristics is determined.. Based upon the determination of the type of frame a frame field which is 118 per Fig 1 is added to the packet in the upstream header which indicated the type of frame or physical characterization of physical layer prepended data. by Edsal (U.S.

4. Claim 4 is rejected under 35 U.S.C. 102(e) as being anticipated by Edsal (U.S. Patent No.: 5,742,604)

Referring to claim 4, Edsall teaches Fig 4 or system which creates a VLAN tagged packet which is in Ethernet format per Fig 3. 210 per Fig 2 inherently has a physical interface which receives the packet which is 304, 306, 308, & 310 per Fig 3 which the examiner interprets as upstream packet. The frame structure shown in fig 3 shows that the data is prepended data in the physical layer. 210 per Fig 2 reads the destination address and source address from the frame data and in the process inherently extracts the packet header data characteristics. 230 and 220 per Fig 2 perform the functions of the upstream processor because they encapsulated the packet data and

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add a VLAN tag information to the frame structure or prepended physical layer. The resulting packet is a VLAN tagged packet which is in Ethernet format.

***Allowable Subject Matter***

4. Claims 5, 7-10 are allowed.

The following is an Examiner's statement of reasons for allowance:

The closest prior art is Chapman (U.S. Patent No.: 6,438,123). Chapman teaches receiving an Ethernet packet or downstream packet. Extracing the Ethernet header information, Suppressing the Ethernet header information. Creating a downstream DOCSIS packet with a CRC error. Also EDHR or encryption information is in the DOCSOS header. The FGPS which is the DOCSIS header inherently has a header check sequence.

Claims 5, 7-9 are considered allowable since when reading the claims in light of the specification, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in the independent claims including "if the downstream packet contains a MAP message, formatting the MAP message in a MAP FIFO format", as specified in claimed in claim 5

The closest prior art is Chapman (U.S. Patent No.: 6,438,123). Chapman teaches: CM which inherently has a processor which receives a down stream packet via a port or packet port ingress engine. The CM inherently has a module that suppressed DOCSIS headers base upon receipt of tag 49 per Fig 3.

Claim 10 is considered allowable since when reading the claims in light of the specification, none of the references of record alone or in combination disclose or suggest the combination of

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limitations specified in the independent claims including "a header creation module for creating a DOCSOS header on the basis of said packet descriptor and appending said DOCSI header to a payload of the down stream packet ", as specified in claimed in claim 11

***Conclusion***

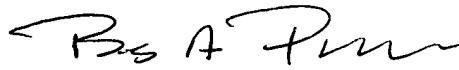
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571/272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert W Wilson  
Examiner  
Art Unit 2661

RWW  
12/16/05

  
**BOB PHUNKULH**  
**PRIMARY EXAMINER**